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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,105	02/14/2002	Richard H. Boz	5707-00400	8519

7590

05/28/2004

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EXAMINER

RAY, GOPAL C

ART UNIT PAPER NUMBER

2111

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/076,105

Applicant(s)

BOZ ET AL.

Examiner

Gopal C. Ray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002 and 13 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-41 is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☒ Claim(s) 42-58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4, 5 and 7.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

1. The examiner acknowledges the substitution of claims 1-41 by amending claims 1, 13, 21, 29 and addition of new claims 42-58 by the Preliminary Amendment filed on 8/13/2003. Claims 1- 58 are presented for examination.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner believes that the title of the invention is broad. A descriptive title indicative of the invention will help in proper indexing, classifying, searching, etc. See MPEP 606.01. However, the title of the invention should be limited to 500 characters.
3. The drawings filed on 2/14/02 are approved by the USPTO draftsman. Direct any inquiries concerning drawing review by the USPTO draftsman to the Drawing Review Branch at (703) 305-8404.
4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. Claims 13-20 and 47-49 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner notes the following ambiguities. However, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.

As per claim 13, line 10, it is unclear as to where the "dock detect signal" is from.

As per dependent claims 14-20 and 47-49, the claims incorporate the deficiencies of parent claim 13.

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between

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the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 5-13, 16-21, 23-27, 29, 31-34 and 36-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 5,862,349 issued to Cho et al. in view of US Patent 6,519,669 issued to Yanagisawa.

As per claim 1, the reference of Cho et al. teaches "a portable computer system" in Fig. 1, element 10; "a bus bridge" in Fig. 1, element 113; "a bus coupled to the bus bridge" in Fig. 1, element 180; "one or more devices coupled to the bus" in col. 4, lines 43-47; "a docking interface coupled to the bus, wherein the docking interface includes a bus switch for coupling the bus to a peripheral interface in a docking station" in Fig. 1, element 120; "a docking connector coupled to the docking interface" in Fig. 1, element 12; "wherein the docking connector is configured for docking the portable computer system to a docking station" in abstract, lines 4-11; "wherein the bus switch is configured to electrically couple the bus to the peripheral interface in the docking station responsive to said docking" in col. 1, line 60 – col. 2, line 4 and "wherein the bus switch is closed without suspending operations on the bus" in col. 3, lines 2-8.

The reference of Cho et al. fails to expressly teach the limitation "wherein the bus switch is closed during a predetermined turnaround cycle without suspending operations on the bus". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Yanagisawa. The reference of Yanagisawa teaches the feature in col. 3, lines 3-7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include

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the above feature in the system of Cho et al. because that would allow the system of Cho et al. to hot dock/undock to and from a bus line at a time when noise will not affect a bus cycle. The reference of Yanagisawa teaches the motivation in col. 3, lines 44-51.

As per claim 4, the reference of Cho et al. teaches "wherein the computer system is configured to drive a clock signal to the peripheral interface in the docking station" in col. 5, lines 11-14.

As per claims 5-6, the claims recite "a translation circuit which is configured to receive or translate commands from the bus". The reference of Cho et al. teaches the features in col. 7, lines 33-43.

As per claim 7, the reference of Cho et al. teaches "storing" in col. 11, lines 39-42 which the examiner considers as applicant's "write command".

As per claims 8-10, the claims recite a "dock detect signal" for docking and undocking. The reference of Cho et al. teaches the features in col. 3, lines 29-33.

As per claims 11-12, the claims recite "power-up/down sequence" in the docking station. The reference of Cho et al. teaches the features in col. 10, lines 27-29.

As per claim 13, the claim recites a method comprising the elements recited in claim 1. In teaching the construction and use of the device, the system of Cho et al. teaches a corresponding method. Therefore, the rejection of claim 1 is also applicable here.

As per claims 16-20, the claims are rejected for the same reasons as discussed in the rejection of claims 4, 11, 8, 5 and 7 respectively.

As per claim 21, the claim is a subset of claim 1 and the corresponding elements are rejected for the same reasons as discussed in the rejection of claim 1 above. Furthermore, the reference of Cho et al. teaches a "switch control circuit" in Fig. 3, element 330.

As per claims 23-27, the claims are rejected for the same reasons as discussed in the rejection of claims 8, 9 and 5-7 respectively.

As per claim 29, the limitations of the claim are rejected for similar reasons as discussed in the rejection of claim 1 above with the exception of "a complementary connector" and "a peripheral interface chip". However, the reference of Cho et al. teaches "a complementary connector" in Fig. 3, elements 370-373 and "a peripheral interface chip" in Fig. 3, element 130.

As per claims 31-34 and 36-38, the claims are rejected for similar reasons as discussed in the rejection of claims 8, 9, 5, 11 and 4. In addition, the reference of Cho et al. teaches "a switch control circuit" (claim 33) in Fig. 3, element 330 and "clock driver chip" (claim 37) in Fig. 1, element 113 and col. 5, lines 11-13.

8. Claims 2, 14, 22 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,862,349 issued to Cho et al. in view of US Patent 6,519,669 issued to Yanagisawa as applied to claim 1 above, and further in view of US Patent 6,336,158 issued to Martwick.

As per claim 2, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of a "low pin count bus". However, the "low pin count bus" was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Martwick.. The reference of Martwick teaches the feature in col. 12, lines 39-51. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include such bus in the system of Cho et al. because of

versatility. The implementation of the above bus would allow the system of Cho et al. to use a widely accepted bus which was well known in the art at the time the invention was made.

As per claims 14, 22 and 30, the added limitation of the claims are rejected for the same reasons as discussed in the rejection of claim 2 above.

9. Claims 3, 15, 28 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,862,349 issued to Cho et al. in view of US Patent 6,519,669 issued to Yanagisawa as applied to claim 1 above, and further in view of US Patent 6,725,320 issued to Barenys et al..

As per claim 3, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of a "bi-directional switch". However, the "bi-directional switch" was well known to one of ordinary skill in the art at the time the invention was made as evidenced by to Barenys et al. The reference of Barenys et al. teaches the feature in col. 7, lines 36-37. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include such switch in the system of Cho et al. because that would allow the system of Cho et al. to make dual connections so as to pass signals simultaneously in both direction.

As per claims 15, 28 and 35, the added limitation of the claims are rejected for the same reasons as discussed in the rejection of claim 3 above.

10. Claims 39-41 are allowable over the prior art on record. The reasons for allowance is that the examiner has done a thorough search and found no prior art that teaches or fairly suggests in combination with other claimed elements, limitations such as "initiating a first turnaround cycle, asserting a command, initiating a second turnaround cycle, and de-asserting the command, wherein the switch is closed simultaneously with the initiating the second turnaround cycle" as claimed in claim 39.

Dependent claims 40-41 further extend the subject matter of parent claim 39. Claims 42-58 are objected to as each claim being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 42-58 are allowable over the prior art on record because they recite additional features in combination with the limitations in the respective parent claims which the prior art on record does not teach or fairly suggest. For claims 47-49 also amend the claims to overcome the objection set forth in paragraph 5 of this office action.

If applicant is aware of any better prior art than those are on record, he must bring the prior art to the attention of the examiner.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. The prior art submitted by applicant has been considered by the examiner and made of record in the file.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [mark.rinehart@uspto.gov].



All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

*Gopal C. Ray*  
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